

# MADELINE HESS

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## EDUCATION

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**Dartmouth College**, Hanover, NH **SEPT. 2015 – JUN. 2019**  
*Bachelor of Arts, Majors: (1) Economics, and (2) Quantitative Social Science with specialty in Government* **GPA: 3.19/4.00**  
Awards and Honors: Completed the Rockefeller Management and Leadership Development Program with Excellence

**Tamalpais High School**, Mill Valley, CA **AUG. 2011 – JUN. 2015**  
Awards and Honors: Graduated with Highest Honors and as a four-year Scholar Athlete **GPA: 4.37/4.00**

## EXPERIENCE

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**College Pulse, LLC**, Hanover, New Hampshire **AUG. 2017 – PRESENT**  
*Data Analyst, Head of Publishing*

- Lead initiative to develop publishing branch for this startup and steward team of reporters with strong quantitative skills
- Gather and synthesize public opinion data using survey data complemented by web-scraping techniques
- Statistical analysis of data for unusual findings, correlations, and prediction relationships using R, Stata and other software
- Translate findings into articles and data visualizations that are interesting and understandable using D3 and JavaScript
- Troubleshoot data analysis, management and visualization problems, website issues, and survey generation

**Dartmouth College Government Department**, Hanover, New Hampshire **JUN. 2017 – PRESENT**  
*Researcher (PI Professor William Wohlforth, Ph.D.)*

- Compile historical case studies in which Great Power nations interfere with one other during identity crises as part of a team
- Investigate US intervention in Central Asia and covert provocation of oppressed Muslim populations during the Cold War
- Analyze recently declassified United States intelligence memos to develop theories of interaction
- Persuasively apply dense and technical theories of international relations

**University of California San Francisco**, San Francisco, California **JUN. 2016 – SEPT. 2016**  
*Summer Intern and Software Developer, Department of Radiology (PI Professor Duan Xu, Ph.D.)*

- Constructed digital signal processing algorithm to discern details of brain tumor metabolism in patients using Python and C++
- Integrated this technique into SIVIC, a larger data visualization package built by a team of UCSF researchers
- Assisted in developing a computational pipeline for researchers to process multi-voxel time series data of brain development implemented through MATLAB

## INVOLVEMENT & LEADERSHIP

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**Dog Days of Summer: Improvised Comedy**, Dartmouth College, Hanover, NH **JUN. 2017 – SEPT. 2017**  
*Long-Form Improvisational Comic*

- Think quickly and creatively and listen closely to teammates to develop entertaining scenes
- Take leadership and communicate confidently to turn ideas into reality in front of audiences of up to 150 people

**Inter-Sorority Council**, Dartmouth College, Hanover, NH **MAR. 2016 – PRESENT**  
*Vice President of Finance*

- Manage the overarching financial scholarship of Dartmouth's sorority system, which consists of over 1,000 members
- Utilize quantitative skills in redesigning the distribution of roughly \$7,000 of termly aid to houses to be more equitable
- Assist in designing and operating sorority recruitment for roughly 450 incoming new members

**Tutor Clearing House**, Dartmouth College, Hanover, NH **JAN. 2016 – JUN. 2017**  
*Tutor and Study Group Leader in Mathematics and Economics*

- Teach students economics and mathematics in intensive one-on-one meetings or in groups of 12
- Hone verbal explanation skills in advanced topics such as microeconomics and game theory, international- and macroeconomics, calculus, and linear algebra

## SKILLS & INTERESTS

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Technical: Excellent skills in Microsoft Word, Excel and PowerPoint. Proficient in Python, MATLAB, Stata, R, D3, HTML and CSS.  
Languages: Fluent in English. Literate and conversant in Spanish.

Affiliations: Association of Women in Mathematics, Dartmouth Outing Club, Kappa Kappa Gamma National Fraternity for Women

*References available upon request.*